CONTENTS OF VOLUME 21

NUMBER 1

1 Calculation of Fluid Flows with Staggered and Nonstaggered Curvilinear Nonorthogonal Grids—The Theory **M. C. Melaaen**

21 Calculation of Fluid Flows with Staggered and Nonstaggered Curvilinear Nonorthogonal Grids—A Comparison **M. C. Melaaen**

41 Enthalpy Method for Inverse Stefan Problems **V. R. Voller**

57 Numerical Solution of Phase Change Problems: An Eulerian–Lagrangian Approach **Marcel Lacroix and André Garon**

79 Well-Conditioned Numerical Approach for the Solution of the Inverse Heat Conduction Problem **E. Bayo, H. Moulin, O. Crisalle, and G. Gimenez**

99 Solution Contour-Based Adaptive Regridding Scheme for Transient Diffusion Problems **V. N. Parthasarathy and Subrata Sengupta**

NUMBER 2

125 Control Volume Finite-Element Method for Navier–Stokes Equations in Vortex–Streamfunction Formulation **M. S. Krakov**

147 Finite-Element Analysis of Unsteady Two-Dimensional Navier–Stokes Equations **B. Ramaswamy, T. C. Jue, and J. E. Akin**

183 Grid Generation and Its Application to Separated Flows **J. P. Maruszewski and R. S. Amano**

199 High-Precision Numerical Simulation with Autoadaptative Grid Technique in Nonlinear Thermal Diffusion **André Chambarel and Maria Pumborios**

217 Hybrid Model for Solidification and Convection **Curtis M. Oldenburg and Frank J. Spera**

231 Novel Strongly Implicit Enthalpy Formulation for Multidimensional Stefan Problems **A. W. Date**

NUMBER 3

253 Combined-Mode Heat Transfer in Radiatively Participating Media: Computational Considerations **Mohammad H. N. Naraghi and Craig J. Saltiel**

269 Covariant Velocity-Based Calculation Procedure with Nonstaggered Grids for Computation of Pulsatile Flows **D. Lee and J. J. Chiu**

287 Numerical Solution of Navier-Stokes Equations with Nonstaggered Grids Using Finite Analytic Method **Hakan Aksoy and Ching-Jen Chen**

307 Design of Two-Dimensional Stefan Processes with Desired Freezing Front Motions **Nicholas Zabaras, Yimin Ruan, and Owen Richmond**

327 Impedance Transformations and Mesh Coarsening in TLM Heat Flow Modeling **D. de Cogan, P. Enders, and X. Gui**

343 A Method for Predicting and Minimizing Numerical Diffusion **P. F. Peterson**

367 Large-Eddy Simulations of Turbulence on the CM-2 **Joseph Robichaux, D. K. Tafti, and S. P. Vanka**

389 Errata

390 Erratum

Following page 390:

Title Page to Volume 21
Contents of Volume 21
Author Index to Volume 21